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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,621	10/20/2000	Eitan T. Wiener	2640/OH058	8869

7590
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01/19/2007

EXAMINER

ALI, SHUMAYA B

ART UNIT

PAPER NUMBER

3771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/693,621

Applicant(s)

WIENER ET AL.

Examiner

Shumaya B. Ali

Art Unit

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/25/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

Claims 1-14 are pending in the instant application.

Response to Amendment

Examiner hereby acknowledges and considers amended to the title and abstract filed on 9/25/2006.

Response to Arguments

Applicant's arguments see remarks filed on 9/25/06 have been fully considered but they are not persuasive.

Arguments with respect to claim rejections - 35 USC § 102(b)

Applicant traverses the rejection previously made with the Kellogg US'569 reference. Applicant argues that Kellogg does not disclose or suggest "a current sensor that senses the current in the line" (see page 11, lines 19 and 20), such argument however is not considered because Kellogg discloses the cited limitation, as clearly depicted in figure 2, 30-15, see also col.8 lines 47-51.

In further argument Applicant presented that Kellogg fails to disclose or suggest a "voltage sensor which senses the voltage on the line" (see page 11, lines 25 and 26), this argument however is not considered because Kellogg discloses the cited limitation, which is clearly depicted in figure 2, E1, see also col.8 lines 54-55.

In further argument Applicant presented Kelloggs fails to disclose above limitations, therefore cannot disclose or suggest “a comparator ...to match the present value (page 11 lines 27-30, and page 10 lines 1-3), and for the very same reason cannot disclose or suggest “a digital phage detector...compares the current signal to the voltage signal” (page 10 lines 3-4) and “a digital impedance detector... compares the ratio of the voltage signal to the current signal” (page 10 lines 6-8), these arguments however are not well taken since as disclosed above that Kelloggs discloses both the current and voltage sensors. Kelloggs further discloses a comparator (36/150, col. 9, lines 28-32), a digital phase detector (30-6, col. 8, lines 29-31) a digital impedance detector (col. 10, lines 54-59) a digital controller (166), and a direct digital synthesis circuit (oscillator 134), thus the rejection still stands.

Arguments with respect to claim rejections - 35 USC § 103(a)

Applicant presented that all depended claims are patentable since claim 1 is not anticipated by Kellogg (see page 11 lines 1-5). However, Kellogg anticipates all limitation cited in claim 1 as discussed above, therefore argument solely based on claim dependency is not persuasive.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kellogg et al. (U.S. Patent No. 5,897,569).

Kellogg discloses an ultrasonic surgical system including a controllable ultrasonic energy generator, a hand piece with a blade that is vibrated at an ultrasonic resonance frequency rate by energy from the generator, and a switch for indicating to the generator the amplitude and frequency of the energy supplied to the hand piece, said ultrasonic generator comprising:

an analog input drive signal generator (30) (col. 3, lines 9-18), which generates an input drive signal having an amplitude and frequency;

an amplifier (30-5) (col. 8, lines 29-31) which receives the analog input drive signal and supplies the energy to the hand piece through a line in response thereto;

a current sensor (30-15) (col. 8, lines 47-51) that senses the current in the line and produces a current signal related thereto;

a comparator (150) (col. 9, lines 28-32) which compares the current signal to a variable preset current value and produces a difference signal that is applied to the analog input drive signal generator so as to change the amplitude of the drive signal to cause the current signal to match the preset value;

a voltage sensor (E1) (col. 8, lines 54-55), which senses the voltage on the line and produces a voltage signal related thereto;

a digital phase detector (30-6) (col. 8, lines 29-31) which compares the current signal to the voltage signal and generates a digital phase code related to the phase difference between them;

a digital impedance detector (col. 10, lines 54-59), which compares the ratio of the voltage signal to the current signal and generates a digital impedance code related thereto;

a digital controller (166) (Fig. 3) which receives the digital phase code and the digital impedance code and produces a digital frequency code in response thereto which is at a frequency which represents the resonance of the hand piece; and

a direct digital synthesis circuit (oscillator 134) (col. 9, lines 8-10) for converting the digital frequency code to an analog frequency signal that is applied to the analog input drive signal generator so as to maintain the frequency at the resonance frequency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kellogg in view of Honda (U.S. Patent No. 6,066,135).

As discussed above, Kellogg discloses the claimed invention with the exception of a controlled power supply for an amplifier. However, Honda, which also relates to an ultrasonic operating apparatus, teaches in Figs. 1, 12 and 13 that it is known to provide a controlled power supply for amplifier. Thus, it would have been obvious to one skilled in the art at the time of the invention to modify the amplifier of Kellogg with the power controlled amplifier of Honda for the purpose of ensuring a stabilized performance and improve the safety of the ultrasonic operating apparatus as taught by Honda (col. 2, lines 44-50).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Art Unit: 3771

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-W-F 8:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Shumaya B. Ali
Examiner
Art Unit 3771


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1/8/07